

REMARKS

Claims 1-13, 16-21, and 23-30 are pending in the present application. Claims 1, 5, 21, 26, and 30 have been amended, Claims 3-4 have been cancelled, and Claim 31-33 have been added, leaving Claims 1-2, 5-13, 16-21, and 23-33 for consideration upon entry of this amendment. Claims 5 and 25 have been amended to remove a typographical error. Antecedent basis for the amendment to Claims 1, 21, 26, and 30 can be found in cancelled claims 3 and 4. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

1. Claim Rejections Under 35 U.S.C. §103(a)

Claims 1-7, 10-13, 16-17, 19-21, and 24-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. 2001/0031831 to Miyoshi et al ("Miyoshi") in view of U.S. Pat. No. 4,011,200 to Yonemitsu et al. ("Yonemitsu"). In particular the Examiner has stated that it would have been "obvious to use a PPE copolymer containing 2-50 wt% of 2,3,6-trimethyl-1,4-phenylene units (as per Yonemitsu et al.) for the copolymer described in Miyoshi et al." (Office Action dated April 4, 2003, page 4) The examiner has further stated "Regarding the impact modifier component, it is maintained that one having ordinary skill in the art would find it obvious to use a combination of SEBS and SEP impact modifier since each member of the combination was shown individually to perform the same chemical function, and the skilled artisan would have expected such a combination to work." (Office Action dated April 4, 2003, page 4) Applicants respectfully traverse the rejection.

Miyoshi generally discloses compositions containing polyphenylene ether, polyamide, an ethylene-alpha-olefin copolymer, electroconductive filler, and a block copolymer. Miyoshi generally contemplates the use of a polyphenylene ether copolymer in paragraph 38. Miyoshi teaches in the examples and in the specification (paragraph 59) that the ethylene-alpha-olefin copolymer ^{may be} is modified with at least one alpha, beta-unsaturated dicarboxylic acid or derivative thereof. As readily understood by one of ordinary skill in the art, the modification of the ethylene-alpha-olefin copolymer is to improve the compatibility between the ethylene-alpha-

olefin copolymer and the phases of the polyphenylene ether/polyamide blend. As mentioned to by the Examiner, Miyoshi does not teach the combination of SEBS and SEP impact modifiers.

Yonemitsu generally discloses a polyphenylene ether copolymer composed of 50-98 mol% of a structural unit derived from 2,6-dimethylphenol and 50-2 mol% of a structural unit derived from 2,3,6-trimethylphenol, and where the copolymer has an intrinsic viscosity of at least 0.3 dl/g as measured in chloroform at 25°C. (Abstract)

The instant application discloses and claims a conductive thermoplastic composition comprising about 20 to about 60 weight percent of a polyphenylene ether copolymer comprising about 75 to about 90 weight percent of 2,6-dimethyl-1,4-phenylene ether units and about 10 to about 25 weight percent of 2,3,6-trimethyl-1,4-phenylene ether units; about 30 to about 65 weight percent of a polyamide; about 1 to about 30 weight percent of an impact modifier comprising a styrene-(ethylene-butylene)-styrene triblock copolymer and a styrene-(ethylene-propylene) diblock copolymer; and about 0.025 to about 40 weight percent of an electrically conductive filler; wherein all weight percents are based on the total weight of the composition.

As is well known in the art polyphenylene ether/polyamide compositions are complex multiphasic compositions that frequently require the use compatibilizing agents. Miyoshi makes explicit reference to the multiphasic nature of the composition in paragraph 62. The Examiner has asserted that it would have been obvious to modify the prior art in two separate ways to produce the claimed invention, namely to employ a polyphenylene ether copolymer and a combination of block copolymers. Applicants respectfully assert that given the complex multiphasic nature of the composition it is not at all obvious to employ the claimed components in the claimed amounts. The impact of the copolymer on the interaction of the combined impact modifiers with the polyamide is not taught or described in any way in the prior art. In fact, the relied upon art does not teach or suggest the combination of the impact modifiers as admitted by the Examiner.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Further, even assuming that all elements of an invention are disclosed in the prior art, an Examiner cannot establish obviousness by locating references that describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would have impelled one skilled in the art to do what the patent applicant has done. *Ex parte Levensgood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. Int. 1993). The references, when viewed by themselves and not in retrospect, must suggest the invention. *In Re Skoll*, 187 U.S.P.Q. 481 (C.C.P.A. 1975). A finding of "obvious to try" does not provide the proper showing for an obviousness determination. The requirement for a determination of obviousness is that "both the suggestion and the expectation of success must be founded in the prior art, not in applicant's disclosure" (emphasis added). *In re Dow Chem.*, 837 F.2d 469, 473, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988). An Examiner, then, cannot base a determination of obviousness on what the skilled person in the art might try or find obvious to try. Rather, the proper test requires determining what the prior art would have led the skilled person to do.

Applicants respectfully assert that the combination of impact modifiers is not taught in the prior art and there is no expectation of success for employing a combination of impact modifiers in a multiphasic polyphenylene ether/polyamide composition comprising a polyphenylene ether copolymer.

Claims 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Miyoshi in view of Yonemitsu and further in view of U.S. Pat. No. 6,528,572 to Patel et al. ("Patel").

Patel generally discloses a composition comprising polymeric resin, electrically conductive filler, and antistatic agents.

Like Miyoshi and Yonemitsu, Patel fails to teach or suggest the particular combination of the two impact modifiers styrene-(ethylene-butylene)-styrene triblock copolymer and a styrene-(ethylene-propylene) diblock copolymer as required by independent Claim 1. Claims 8 and 9 depend from Claim 1 and, therefore, have not been rendered obvious by Miyoshi, Yonemitsu, and Patel.

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyoshi in view of Yonemitsu and further in view of U.S. Pat. No. 6,277,907 to Gelbin.

Gelbin generally discloses a method for stabilizing a thermoplastic resin, which may also contain carbon black and/or glass, wherein the method comprises adding to the resin a stabilizing amount of at least one sterically hindered phenol antioxidant, at least one secondary amine antioxidant and/or at least one N,N'-substituted oxamide antioxidant, and at least one thioether antioxidant.

Gelbin does not teach or suggest the particular combination of the two impact modifiers styrene-(ethylene-butylene)-styrene triblock copolymer and a styrene-(ethylene-propylene) diblock copolymer as required by Claim 18. As Miyoshi, Yonemitsu, Patel, and Gelbin fail to teach each and every element of Claims 1-2, 5-7, 10-13, 16-17, 19-21, and 24-30, the claims have not been rendered obvious over the cited references. Accordingly the Applicants respectfully request reconsideration and withdrawal of the obviousness rejections.

X Claims 1-3, 6, 7, 10, 16, 17, 19, 21, 26, 27, 29, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over EP 0 924 261 to Koevoets et al. ("Koevoets") in view of Yonemitsu.

Koevoets generally describes thermoplastic compositions comprising a compatibilized polyphenylene ether-polyamide resin blend which is modified with an impact modifier containing at least moieties that are reactive with the polyamide resin. The preferred impact modifier is an alkylene-alkyl (meth)acrylate copolymer comprising at least two moieties selected from the group consisting of carboxylic acid, anhydride, epoxy, oxazoline, and orthoester.

As amended, the present independent Claims 1, 21, 26, and 30 require the combination of nylon 6 and nylon 6,6. Neither Koevoets nor Yonemitsu teach or suggest this combination of polyamides. As the references fail to teach each and every element of the independent claims and their corresponding dependent claims, the Applicants respectfully request reconsideration and removal of the obviousness rejection over Claims 1-2, 6, 7, 10, 16, 17, 19, 21, 26, 27, 29, and 30.

In view of the foregoing amendments and remarks withdrawal of the rejection of Claims 1-2, 5-13, 16-21, and 23-30 under 35 U.S.C. §103 and allowance of the claims is respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by the Assignee.

Respectfully submitted,

CANTOR COLBURN LLP

By: Patricia S. DeSimone

Patricia S. DeSimone
Registration No. 48,137
Customer No. 23413

Roberta L. Pelletier
Registration No. 46,372

Date: July 14, 2003
Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929

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